STATE OF CALIFORNIA — THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

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Re: Cabrillo Port Liquefied Natural Gas Deepwater Port (Federal Docket No. USCG-2004-16877, State Clearinghouse No. 2004021107)

The California Energy Commission appreciates the opportunity to review the Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) for the Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port. The enclosed comments reflect the Energy Commission's role in energy planning as well as its experience evaluating the environmental issues and public health and safety concerns that arise when siting major energy facilities through its jurisdiction of licensing thermal power plants.

Energy Planning Comments

As a public information document, the EIS/EIR should provide information on the energy context within which this project is being considered. We believe the EIS/EIR should inform the public regarding which agencies are responsible for making such energy regulatory and planning decisions. For information on the state energy context, please refer to the *Energy Action Plan* and the Energy Commission's *2003 Integrated Energy Policy Report* (Section 3) and 2004 *Integrated Energy Policy Report Update* (Chapter 5) available on the Energy Commission's website: S008-1

- ***Energy Action Plan***: [http://www.energy.ca.gov/energy_action_plan/index.html]
- ***Integrated Energy Policy Report***: [http://www.energy.ca.gov/energypolicy/index.html]

Natural Gas Needs

- Executive Summary, page ES-2, lines 18-21. We suggest clarifying the text by replacing the sentence that reads "Among the CEC's recommendations is to construct LNG receiving terminals that can be used as potential future supplies of natural gas from new sources and, according to the CEC, the proposed Project could supply S008-2

S008-1
Section 1.2.3 contains updated information on natural gas needs in California. Forecast information has been obtained from the California Energy Commission.

S008-2
The text in Section 1.2.3 (summarized in the Executive Summary) cites more recent California energy documents, such as the CEC's 2005 Natural Gas Assessment Update and the CEC's and CPUC's 2005 Energy Action Plan II: Implementation Road Map for Energy Policies.

approximately 13 percent of California's average daily needs" with the following new text:

> In the *2003 Integrated Energy Policy Report*, the California Energy Commission recommends that "the state should encourage the construction of LNG facilities and infrastructure and coordinate permit reviews with all entities to facilitate LNG facilities and infrastructure development on the West Coast" (page 29). An LNG receiving terminal would expand the state's natural gas infrastructure and would enable California to receive an additional source of natural gas, diversifying the state's natural gas supplies. The Energy Commission has stated that the proposed Project could supply approximately 13 percent of California's average daily gas needs.
>
> LNG may be regarded as a less reliable supply of natural gas or more prone to supply disruptions relative to in-state production or natural gas imported over interstate pipelines from North American gas basins. This is a perceived risk because LNG deliveries could be interrupted temporarily due to "upstream" problems with the natural gas liquefaction process or with LNG shipping operations. The Project, however, addresses these potential short-term supply-disruption risks by including new natural gas storage capacity. Such storage capacity would enable the Project to maintain its delivery commitments into California using natural gas previously put into storage until the delayed LNG shipments arrive at the port.

- Section 1.1 Introduction to Environmental Analysis, page 1-7, lines 28-30. The North Baja Pipeline Expansion Project did not increase the natural gas supply to California significantly. It relieved pipeline congestion that occurred when gas was shipped to Baja California from San Diego. A better example of a pipeline project, in addition to the Kern River Pipeline expansions, is the expansion of the Transwestern Pipeline, which increased California's access to San Juan Basin gas. S008-3

- Section 1.1 Introduction to Environmental Analysis, page 1-7, line 38. We suggest deleting the word "declining" before "gas supplies" because U.S. and Canadian production has flattened and may have peaked. However, it is too soon to tell if production is actually in decline. The DEIS/DEIR correctly characterized the concern about declines on pages 1-8, lines 3 and 4. S008-4

- Section 1.1 Introduction to Environmental Analysis, page 1-8, lines 12-13. We suggest clarifying the text to say the following: "In addition to efficiency programs and use of renewable power sources, the CEC has identified LNG-receiving terminals on the Pacific Coast as <u>part of the natural gas infrastructure which would allow for</u> a potential future <u>natural gas</u> source, enabling California gas markets to access supplies from producing basins throughout the Pacific and Indian Oceans (e.g., Indonesia, Australia, Russia, South America, and Alaska)." S008-5

S008-3
Section 1.2.3 has been revised with the suggested change.

S008-4
Since the issuance of the October 2004 Draft EIS/EIR, the California Energy Commission has issued new forecasts about the natural gas needs in California and Section 1.2.3 has been revised.

S008-5
Section 1.2.3 contains revised text.

Public Safety

- The May 13, 2004 report titled *Consequence Assessment Methods for Incidents Involving Releases from Liquefied Natural Gas Carriers* prepared by ABS Consulting for the Federal Energy Regulatory Commission (under contract number FERC04C40196) evaluated what models should be used to assess LNG impacts. Because there is no information about the models used in the DEIS/DEIR, the reader does not know if the guidelines recommended by ABS/FERC were, in fact, followed, and if not, why not. We suggest that Section 4.2 of the EIS/EIR indicate whether the models used conform to the guidelines put forward by FERC for modeling of LNG spills and incidents. If the models do not follow FERC guidelines, the document should indicate why they were selected for use. S008-6

- Section 4.2, Impacts PS-3, PS-4, PS-6, and PS-7. All impacts that could result in a release of natural gas are characterized as "significant" despite mitigation measures that meet or exceed (e.g., upgrading pipeline segments in less populated areas to meet Class 3 design and operation criteria) stringent regulatory requirements. The Energy Commission does not characterize the potential environmental impacts of proposed natural gas pipelines associated with new gas-fired electricity generating plants as significant if the pipelines are found to meet or exceed all applicable laws, ordinances, regulations, and standards controlling their construction and operation. We recommend that with the implementation of the stated mitigation measures, the State Lands Commission and U.S. Coast Guard consider Impacts PS-3, PS-4, PS-6, and PS-7 as less than significant. S008-7

- Section 4.2, page 4.2-14, last paragraph. The discussion of the worst-case consequence (instantaneous release of LNG from three Moss spheres) indicates that there is no credible sequence of events that could trigger such an event. This seems to contradict the language on page 4.2-79 (lines 29-35). It is not clear whether the "no credible sequence of events" determination relates to "instantaneous release" or the fact that three spheres could rupture and release their contents. Obviously, that large an amount of LNG could not all be released at once. Was this assumption used for comparative purposes (e.g., for modeled releases in other locations)? If so, then compare the results. If not, then either state why such an assumption is appropriate or use the more realistic release rates. Note that the recent Bear Head LNG terminal environmental document discusses the potential for escalating events leading to a total release of contents from a carrier. The probability of this scenario is considered very low but not nil. S008-8

- Section 4.2, page 4.2-16, lines 20-25 and Table 4.2-2-1. We recommend providing more information about the model and assumptions; including whether the model has been validated (this is implied but not stated). Also, the meteorological assumptions need more explanation. The wind speeds shown in Table 4.2.2-1 are much lower than the average wind speeds discussed in Section 4.1.9 (19.3 m/s vs. 2-10 m/s). Additionally, we recommend using consistent measures of wind speed, for instance, Table 4.1-5 describes wind speed in terms of knots, but the text uses miles/hour and S008-9 S008-10 S008-11

S008-6
The Project is regulated by the USCG and MARAD under the authority of the Deepwater Port Act. FERC's regulations are prescriptive and standardized to address the general siting of onshore LNG terminals. In contrast, due to various different designs of deepwater ports, the USCG conducts site-specific independent risk and consequence analyses using the most recent guidance and modeling techniques. The guidance used for Cabrillo Port is Sandia National Laboratories' "Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill Over Water." This report recommends a framework for analyses of large LNG spills onto water. It was prepared for the U.S. Department of Energy (DOE), and an external peer review panel evaluated the analyses, conclusions, and recommendations presented.

S008-7
As discussed under "Significance Criteria" in Section 4.2.7.6, the determination of an appropriate class for each public safety impact is based solely on the potential for causing serious injury or fatality to a member of the general public, even if such impacts were unlikely to occur. Most of the public safety impacts that are identified as significant result from accidents or other unanticipated releases that have a very low statistical probability of occurring; nonetheless, if such impacts were to occur, the consequences would be significant according to the conservative criteria identified.

S008-8
NEPA does not require "worst-case analysis" but does require the agency to prepare a summary of existing relevant and credible scientific evidence and an evaluation of adverse impacts based on generally accepted scientific approaches or research methods. However, the Independent Risk Assessment (IRA) (Appendix C1) defines and evaluates representative worst credible cases (scenarios of events that would lead to the most serious potential impacts on public safety). These included accidents that would affect one, two, or all three tanks of the FSRU.

As shown in Tables 4.2-1, 4.2-2, 4.2-7, and 4.2-8, the release of the contents of all three tanks (the entire contents of the FSRU and an attending LNG carrier) is addressed in the escalation scenario associated with a large intentional event. Section 4.2.7.6 contains additional information on how intentional events are addressed. Although the 2006 U.S. Department of Energy's Sandia National Laboratories third-party technical review of the 2004 IRA found that the three-tank simultaneous release (a massive LNG release in a short time period) was not credible, Sandia recommended the

consideration of a cascading (escalation) three-tank scenario.

S008-9
Section 4.2 and Appendix C contain additional and revised information on public safety.

The Independent Risk Assessment (IRA) has been updated since issuance of the October 2004 Draft EIS/EIR. The lead agencies directed preparation of the current IRA, and the U.S. Department of Energy's Sandia National Laboratories independently reviewed it, as discussed in Section 4.2 and Appendix C.

Section 4.2.7.6 and the IRA (Appendix C1) discuss the models and assumptions used and the verification process. Sandia National Laboratories (Appendix C2) concluded that the models used were appropriate and produced valid results.

S008-10
Section 4.1.8 contains additional information on wind speed and direction. The Independent Risk Assessment (Appendix C1) incorporates recommendations by Sandia National Laboratory (Appendix C2) regarding wind speed in vapor dispersion modeling and describes how wind speed was used in the modeling. “2006 Independent Risk Assessment" in Section 4.2.7.6 summarizes the selection of wind speed used in the IRA modeling.

S008-11
See the response to S008-10. Section 4.1 text includes conversions from knots to miles per hour and meters per second.

meters/sec. Please also explain to the reader how frequently the Stability Class/wind speed combinations would occur. S008-12

- Section 4.2, page 4.2-32, lines 10-12 and Table 4.2.4-2. We suggest clarifying the text because although the text describes a "dramatic decrease" in reportable incidents, Table 4.2.4-2 shows that the incidents per year for some categories increased from the 1990-1999 reporting period to the 2000-2003 reporting period. S008-13

- Section 4.2, page 4.2-67, AMM PS-1b. We suggest providing more information either here or elsewhere in the text regarding what a Safety Management Certificate entails. What criteria, tests, etc. are required to obtain this certificate? The public should have information about whether or not this certificate would significantly enhance safety. S008-14

- Section 4.2, page 4.2-76, line 13. We suggest defining the term "'Safety Case' regime" for readers. S008-15

Environmental Impacts

Aesthetics

- Section 4.4, page 4.4-24, line 17 and Table 4.4-4; Table 4.4-5; and page 4.4-34, line 25. The DEIS/DEIR states that light fixtures would be shielded "180 degrees" where feasible. Security lighting for the odorization facility and metering station are referred to as both "full cut-off fixtures" and 180 degree shielded. We suggest clarifying what "180 degree" shielding means. If this means that only one side of the light fixture is shielded then lights would not be shielded for portions of the year when the facility rotates. Full cut-off (fully shielded) fixtures are often defined as follows: Zero candela intensity at, or above, horizontal (90 degrees above nadir) and limited to a value not exceeding 10 percent of lamp lumens at a vertical angle of 80 degrees above nadir. S008-16

- We suggest that the document address whether the project would be a source of substantial glare that could adversely affect daytime views, particularly from recreational boats. We recommend that mitigation measures, such as low reflective colors and finishes on project structures, be identified to reduce daytime glare impacts. S008-17

- The DEIS/DEIR explains how the distance to the horizon is calculated based on an observer's height above the surface of the ocean (Section 4.4.4.2, page 4.4-8). We recommend that the document also explain, for an object located beyond the horizon, the calculation for determining how much of that object would be visible to the observer. For example, it would be helpful to readers if the document showed how it was calculated that only the top 69 feet of the 148-foot LNG main structure would be visible from KOP 3, the Malibu Bluffs (page 4.4-14). S008-18

S008-12
Section 4.1.8.5 contains information on existing wind conditions at the offshore Project site. Figure 2.1-2 depicts the maximum area from the FSRU in any direction that could be affected in the event of an accident; impacts would not reach the shoreline. Section 2.3.5.3 of the Independent Risk Assessment (see Appendix C1) contains information on the environmental, meteorological and ocean conditions that were considered in the modeling of LNG spills and dispersion.

S008-13
The commenter is correct that the average number of pipeline incidents rose during 2000-2003 compared to the 1990s, as shown in Table 4.2-10. The "Historical Natural Gas Pipeline Incident Data" in Section 4.2.8.1 discusses the decrease compared to the 1970s and 1980s. Figure 4.2-2 has been added to graphically illustrate pipeline incident and fatality trends.

S008-14
Section 4.3.1.4 contains information on IMO certification for U.S. and foreign vessels. Nations that are members of the International Maritime Organization (IMO) and signatories to the 1974 International Convention Safety of Life at Sea must comply with the International Management Code for the Safe Operation of Ships for Pollution Prevention (International Safety Management [ISM] Code). For U.S.-flagged vessels; the ISM Code is codified in 46 U.S.C. Chapter 32.

To receive a Safety Management Certificate under the ISM Code, the vessel owner or operator that engages in foreign voyages must undergo a comprehensive audit to determine if the vessel is operated safely and responsibly and is in compliance with the ISM Code. The audit must be conducted in accordance with IMO guidelines and by a third-party auditor such as a classification society, e.g., ABS, Lloyds, and DNV.

Once the audit is satisfactorily completed, the vessel operator would be issued either a Document of Compliance or, for U.S.-flagged vessels, a Safety Management Certificate, which is valid for five years. In the interim, the USCG must examine the vessel annually (for foreign vessels, at each return U.S. visit if more than one year since the last return visit) to ensure that the vessel is in compliance with the requirements of the program. For U.S.-flagged vessels, a Safety Intermediate Verification Audit must be conducted between the 24th and 36th month of the Safety Management Certificate's five-year period of validity. Any discrepancies must be corrected as soon as possible. Depending

upon the severity of the problem, the Document of Compliance may be rescinded and vessel detained or denied entry into U.S. waters until the problems are corrected.

The Rules for the Safe Operation of Vessels and Safety Management Systems and USCG regulations for administrating and enforcing ISM Code requirements are found in 33 CFR 96.

S008-15
A safety case is defined as a documented body of evidence that provides a demonstrable and valid argument that a system is adequately safe for a given application and environment over its lifetime.

S008-16
The term "full cut-off fixtures" is synonomous with "180 degree shielding."

S008-17
The Applicant has proposed that the FSRU hull be painted Admiralty Pacific Gray or a similar shade. The USCG would determine the final paint color and scheme for the FSRU hull based on navigational safety, among other considerations.

S008-18
Appendix F provides the distance calculations for the aesthetics analysis in Section 4.4.

Air Quality

While we agree with the DEIS/DEIR on various mitigation measures such as BACT, clean fuel, and offsets, we have the following comments to offer:

- Section 4.6 indicates that California diesel fuel, or natural gas, when feasible, would be used to fuel the backup generator, the emergency fire pump engine, and the boats. The DEIS/DEIR states that construction would be completed in 2008/2009. Beginning July 1, 2006, California Air Resources Board (CARB) on-road diesel will be 15 ppm sulfur content. Furthermore, CARB adopted a rule requiring harbor craft to use on-road diesel beginning July 1, 2007. Backup generators are required to use CARB diesel beginning in 2005. We recommend that California's ultra low sulfur diesel fuel (15 ppm sulfur content) be used to fuel the aforementioned equipment to further lower emissions if natural gas is not used. S008-19

- Mitigation measure AMM AIR-1a (page 4.6-12) states that the Applicant would use "low-sulfur diesel" to fuel the construction equipment. The EIS/EIR should clarify what is meant by "low-sulfur diesel." We recommend the use of California's ultra low sulfur diesel (15 ppm sulfur content) to fuel the construction equipment in the event that construction begins prior to July 1, 2006. In addition, we recommend the use of catalyzed diesel particulate filters on construction equipment when feasible. S008-20 S008-21

- We recommend early identification of sources used to provide offsets to allow the public and various agencies to address their effectiveness in mitigating the project's emissions impacts. S008-22

- Section 4.6.4 provides discussions of the project's impacts on air quality, and concludes that the project's impacts are not significant. We recommend that the conclusions about the project impacts be supported by the use of an air quality model that is accepted by the United States Environmental Protection Agency, the South Coast Air Quality Management District and the Ventura County Air Pollution Control District. S008-23

- Page 4.6.5 lists three natural gas Wartsila generating sets among the emission sources, whereas Table 4.6-3 on the next page lists these generators as being dual-fueled (gas and California diesel). The table should be modified to reflect gas as the only fuel source for these three generators. S008-24

- The reference to the "CEC CPM" in the last line of Table 4.6-6 should be deleted and replaced with a reference to "Executive Officer and USEPA". S008-25

- The document should identify any non-criteria air contaminant, which can range from diesel particulate matter to elemental metal, emitted during the project's construction and operation. It should also evaluate the risks to human health from these contaminants using, as appropriate, ambient air modeling analyses and health risk assessments. S008-26

S008-19
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. The following Project changes would reduce emissions of nitrogen oxide and other air pollutants:
- Reduction in the number of LNG carriers and change in crew vessel trips;
- Use of natural gas to power LNG carriers in California Coastal Waters;
- Diesel-fueled support vessels with emission controls; and
- Use of specific engine standards for onshore construction equipment.
The Applicant has committed to implement the following additional measure to reduce air emissions:
- Repowering of existing non-Project vessels with cleaner-burning engines.
These changes required revisions to air pollutant emission estimates and related air quality analyses.

The Applicant is required to adhere to all applicable Federal, State, and local laws, rules, regulations, and permit requirements in the execution of all phases of the Project.

S008-20
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. LNG carriers associated with the Project would operate on natural gas (boil-off gas from the LNG cargo) with 1% diesel pilot during all operations in California Coastal Waters. Tugs and crew vessels would have diesel engines equipped air pollution control technology that would result in emissions comparable to emissions from natural gas-fueled engines.

Section 4.6.1.3 contains information on emissions from Project vessels operating in California Coastal Waters as defined by the California Air Resources Board.

S008-21
"The Applicant has proposed to use only onshore construction equipment compliant with USEPA Tier 2, 3, or 4 nonroad engine standards. Further, a mitigation measure would require that all onshore construction equipment with a rating between 100 and 750 hp would be required to utilize engines compliant with USEPA Tier 3 nonroad engine standards. USEPA's Tier 2, 3, and 4 nonroad engine standards include more stringent emission standards for particulate matter from diesel engines. Section 4.6.4, under Impact AIR-1, contains information on this topic."

S008-22
The USEPA has made a preliminary determination, on which the lead agencies must rely, that the FSRU should be permitted in the same manner as sources on the Channel Islands that are part of Ventura County. Section 4.6.2 contains an updated discussion of relevant regulatory requirements.

S008-23
Section 4.6.4 contains a revised discussion of this topic.

S008-24
The FSRU's main and backup generators have the capability to operate with natural gas or diesel. The generators would operate on 100 percent diesel only during emergencies, monthly maintenance testing, training drills, and initial commissioning of the FSRU. Section 4.6.1.3 contains a revised discussion of this topic.

S008-25
Section 4.6.4 has been revised and contains additional information. The referenced table has been replaced. Fugitive dust control plan requirements are described under Impact AIR-2.

S008-26
Impacts AIR-8 and AIR-9 in Section 4.6.4 present a revised discussion of this topic.

Biological Resources - Marine

- Page 4.7-10, lines 24-39. Section 4.7 states that no impacts to the Mariculture Project are anticipated because this project would be approved as a three-year trial project and would conclude prior to construction commencing on the Cabrillo Port LNG Deepwater Port. Impacts to the Mariculture Project should be analyzed in the event that the Mariculture Project is extended and is operating during construction of the Cabrillo Port LNG Deepwater Port. S008-27

- Page 4.7-43, lines 37-38. The DEIS/DEIR states that with the implementation of mitigation measures, impacts from an accidental release of LNG would be mitigated to a level below significant. The mitigation measures list the requirements for a spill response plan, training, notification and emergency shutdown technologies. Although these mitigation measures can be implemented to reduce impacts, we suggest that the document identify the size of the accidental release that was analyzed and include a discussion of whether a major accidental release could also be mitigated to a level less than significant. S008-28

- We recommend that the document describe the potential impact to biological resources and the mitigation to be implemented in the event that contaminated sediments are disrupted during the construction of the natural gas pipeline. S008-29

Biological Resources – Terrestrial

- It appears that the analysis relied on existing California Natural Diversity Database records and other environmental impact documents to determine locations of special-status species (e.g., page 4.8-36 states that no botanical survey was completed). We recommend that protocol level surveys be completed and impacts assessed for the pipeline routes. A mitigation plan should be developed (including habitat compensation alternatives for sensitive habitats and species) and included in the final EIS/EIR. S008-30 S008-31

- Page 4.8-36, lines 28-29. Section 4.8 states that no impacts would occur to salt marsh bird's beak because the project would be constructed using horizontal directional drilling; however, a return of drilling mud and clean-up crews could have an impact on the known population. Mitigation should be developed and described in the EIS/EIR in the event impacts on the plant occur. S008-32

- Page 4.8-54, lines 24-30. Section 4.8 states that surveys would be completed for wintering birds, including burrowing owls, if construction activities were to occur during winter. Because project construction could ultimately occur during the winter, we recommend that protocol survey results, habitat compensation, and a mitigation plan for burrowing owls and other wintering species be developed and included in the EIS/EIR. S008-33

S008-27
Sections 4.7.1.4 and 4.20.1.2 discuss this topic.

S008-28
Appendix C1 and Impact PS-2 in Section 4.2.7.6 discuss this topic.

S008-29
Impact HAZ-3 in Section 4.12.4 discusses this topic.

S008-30
Subsequent to the completion of the October 2004 Draft EIS/EIR, the Applicant completed surveys of the pipeline rights-of-way in accordance with California Department of Fish and Game protocol. Surveys included a wetland delineation survey that meets the California Coastal Commission and California Department of Fish and Game wetland definition, botanical and wildlife surveys for Federal and State listed species, a wintering waterfowl survey, a burrowing owl survey, and surveys to determine whether any oak trees would need to be removed during construction. Section 4.8 has been updated with the results of these surveys, and Section 4.8.4 contains updated mitigation measures. Additional preconstruction plant and wildlife surveys, specific to the final construction timeline and designated pipeline alignment, would be completed for special status species, federally listed species, or California protected species specified by the USFWS or the CDFG, to minimize the potential for causing mortality of local wildlife. However, for purposes of the impact analyses and resultant mitigation, all relevant species are presumed to exist in the vicinity of the proposed Project.

S008-31
Section 4.8.4 contains revised text on potential impacts on terrestrial biological resources and mitigation measures to address impacts.

S008-32
The discussion of the salt marsh bird's beak under Impact TerrBio-2 in Section 4.8.4 has been revised.

S008-33
As described above, wintering waterfowl and burrowing owl surveys were completed. As stated in Section 4.8, potential burrowing owl habitat was found during burrowing owl surveys, but no owls or evidence of owls were found.

Cultural Resources

- Section 4.9, page 4.9-1, lines 28-35. In this paragraph, we recommend adding reference to Public Resources Code (PRC) section 15064.5 (c) (2) (the California Environmental Quality Act Guidelines (CEQA)) which states that an archaeological site should be assessed regarding whether it meets the criteria for an historical resource. If it does not meet criteria as an historical resource, then a determination should be made whether it meets the definition of a unique archeological resource (PRC, section 21083.2). S008-34

- Page 4.9-5, lines 20-26. We suggest clarifying whether city and county cultural resource lists were consulted to determine whether any cultural resources are listed under a local ordinance. If any are listed, those cultural resources would be considered eligible for the California Register of Historic Resources. We also recommend clarifying whether any archaeological or historical societies were contacted, what their responses were, and whether any resources were identified. S008-35

- Additionally, we recommend clarifying whether surveys were conducted within the last five years. Pursuant to PRC section 5024.1(g) (4), we recommend that areas be resurveyed where surveys are older than five years. The document was not clear on where areas were previously surveyed, surveyed for this project, or will be surveyed prior to permitting. A map would be helpful to the reader. S008-36

- Page 4.9-11 through -15. Table 4.9-2 does not identify who made a determination of historical significance (the "Status" column) or when the determination was made. S008-37
  Additionally, impacts are identified as adverse without a determination of significance (PRC, section 15064.5 (a) (3)). We believe a determination of historical significance is necessary prior to determining that there is an adverse impact to a cultural resource. S008-38
  We recommend that all cultural resources tasks be conducted by, or under the direction of, someone who meets Secretary of Interior Standards for cultural resources professionals. The EIS/EIR should provide the qualifications of cultural resources personnel to show that these standards have been met. S008-39

- Table 4.9-2 lists historic (built environment) resources as well as archaeological resources. We suggest clarifying whether any of the existing buildings or structures that would be impacted by the project were considered for eligibility to the National Register of Historic Places or California Register of Historic Resources (CRHR). Following the guidance of the Office of Historic Preservation, buildings or structures that are more than 45 years old should be considered for eligibility to the CRHR. Pursuant to the California Code of Regulations, section 4851(d) (2), a resource may be considered for eligibility to the CRHR if sufficient time has passed to understand its historical importance. We suggest that in areas where buildings or structures will be constructed, adjacent properties should be surveyed for historical resources that may be impacted by new structures. S008-40

S008-34
Section 4.9.1.1 has been revised in response to the comment.

S008-35
Section 4.9.1 documents the literature review, records search, and survey process and all contacts made.

S008-36
Section 4.9.1 contains information on cultural resources surveys, including the results of an onshore pedestrian cultural resources survey and an assessment of national and state registry eligibility.

S008-37
The status of cultural resources within the Project right-of-way was field-verified to determine the status of each site. The qualifications of the archeologist who prepared Section 4.9 are provided in Chapter 7.

S008-38
See the response to Comment S008-37.

S008-39
See the response to Comment S008-37.

S008-40
See the response to Comment S008-36.

- Page 4.9-18, lines 2-16. The title "Significance Criteria" implies that these are criteria for determining the significance of impacts. However, because surveys that would identify cultural resources have not been conducted, it is not possible to determine whether there is an impact. These criteria cannot be used for determining significance. Recommendations of significance need to be based on CEQA categories provided in CEQA Guidelines, PRC section 15064.5 (a) (3) (A) (B) (C) (D). Significance needs to be determined before impacts can be identified. An impact to a cultural resource is an impact to the values that make the resource significant. S008-41 S008-42

- Page 4.9-19. Impact Cultural-1. We recommend clarifying what types of geophysical surveys were conducted and what types of additional surveys would be performed to identify underwater resources. S008-43

- Page 4.9-19 through -24. Monitoring is an effective tool for identifying resources discovered during project construction and ensuring avoidance; however, additional mitigation may be necessary, e.g., data recovery and recordation. We recommend that the document identify the procedures that would be implemented if there is a discovery during the construction of the project. The document should describe clear channels to identify who will be notified in the event of a discovery. The lead agency determines a resource's significance (PRC, section 15064.5 (a) (3)). S008-44

- Page 4.9-20, lines 28-35 and page 4.9-21, lines 1-28. We recommend clarifying whether all Native American individuals or groups listed by the Native American Heritage Commission were contacted for information regarding the project, and clarify whether any areas of cultural significance that might be impacted by the project were identified. S008-45

- Page 4.9-19 AMM Cul-1. We recommend clarifying whether a Memorandum of Agreement or Programmatic Agreement would be prepared to address the cultural surveys that have not been completed to meet the federal regulations (36 Code of Federal Regulations 800). S008-46

Geologic Resources

- We recommend that Table 4.11-3 (Section 4.11) reference the 1997 Uniform Building Code (UBC), not the 1994 UBC, and also reference the applicable edition of the California Building Code (2001). S008-47

Hazardous Materials

- We recommend that the document discuss the transport of hazardous waste from the offshore location to shore and the potential health risks. It should focus on the preparation and implementation of the various plans, programs and permits geared towards water transport of hazardous waste. S008-48

S008-41
See the response to Comment S008-36.

S008-42
The significance criteria listed in Section 4.9.3 cite State cultural resource standards among the criteria used to determine cultural impacts. In addition, Table 4.9-4 cites the CEQA among the laws and regulations affecting cultural resources.

S008-43
Section 4.9.1.3 discusses this topic.

S008-44
The Applicant has included an Unanticipated Discovery Plan as part of the Project, as discussed under Impacts CULT-2 and CULT-3 in Section 4.9.4.

S008-45
Section 4.9.1.3 discusses these topics.

S008-46
See the response to Comment S008-36.

S008-47
The references to the UBC and the CBC in Table 4.11-3 have been revised.

S008-48
Sections 4.12.3 and 4.12.4 address this topic.

- Mitigation measure HAZ-8b would require the Applicant to coordinate with the DTSC, prior to any surveys or construction activity, to determine whether additional Unexploded Ordnance (UXO) surveys would be warranted and how those surveys should be conducted. Section 4.12 should elaborate on how any UXO surveys would be planned, designed and executed and potential protocols and procedures which could be put into place to protect workers and the public. S008-49

Noise

- Impact NOI-4. According to Table 4.14-5, the estimated combined noise level for the worst case scenario at the residences 0.5-mile from the horizontal directional drilling would be approximately 68 dBA. On page 4.14-9, lines 30-34, Section 4.14 states that this shore crossing would be subject to the City of Oxnard sound ordinance for Sound Zone III Industrial Property, which limits noise levels to 70 dB at any time. Note that the most sensitive receptors affected would be residential, not industrial. According to Table 4.14-2, under Local Ordinances, the City of Oxnard limits noise levels at residential receptors to 50 dBA for nighttime hours (note that construction will occur 24 hours/day for 45 days (page 4.14-9, lines 25-26)). The estimated construction noise level of 68 dBA exceeds this level by 18 dB and should be mitigated. If this is in fact the case, we recommend that the EIS/EIR discuss the additional measures needed to mitigate the noise level to a less than significant level and the new estimated noise level resulting from these measures at the residences. S008-50 S008-51

- Impact NOI-5. The DEIS/DEIR states that the proposed Center Road Pipeline route passes one school and several residences and Line 225 Pipeline Loop passes through residential areas (page 4.14-12, lines 20-22). The DEIS/DEIR further states that some of the noise levels generated by onshore construction would exceed noise ordinances for the City of Oxnard and City of Santa Clarita (page 4.14-12, lines 24-25). The DEIS/DEIR concludes that onshore pipeline construction would generate noise levels that would have significant impacts and that implementation of MMs NOI-5a through -5d would reduce these impacts to less than significant levels. We believe a more exact explanation of the existing noise levels at each individual sensitive receptor, the duration of the construction noise impacts, and the estimated noise levels after mitigation are needed to accurately evaluate the impacts of the project construction and the effectiveness of the mitigation measures. S008-52

- Page 4.14-14, Section 4.14.5.2 (Alternative DWP location, pipeline) states that residences may experience noise levels higher than the City of Oxnard's allowable noise level of 65 dBA in the daytime for a commercial area (page 4.14-16, lines 20-22). The threshold should be 55 dBA for residential receptors (Table 4.14-2), not 65 dBA for commercial receptors. The document should disclose by how much the construction noise levels would exceed the 55 dBA limit at the affected residences. This section further states that implementation of MMs NOI-5a through -5d would help to reduce these impacts. The document should provide the new estimated noise levels resulting from these measures at the residences and should say whether the impacts after mitigation would be significant or not. S008-53 S008-54

S008-49
Impact HAZ-4 in Section 4.12.4 addresses this topic.

S008-50
Impacts NOI-4, -5, and -6 in Section 4.14.4 address this topic.

S008-51
Section 4.14.4 contains information on noise impact analysis and mitigation. Additional mitigation measures have been added that would require the Applicant to: (1) conduct noise monitoring before beginning construction to establish noise background levels, (2) meet the noise ordinance standards for the area in which construction is occurring, (3) establish a hotline for members of the public to call if they have a noise complaint, and (4) establish procedures to respond to any noise complaints or exceedances of ordinances.

S008-52
To establish noise baseline at this time would not necessarily be representative of the noise baseline at the time of construction. It is reasonable to assume that noise levels should be in compliance with city and county ordinance levels for the sake of the environmental analysis.

Section 4.14.4 contains additional information about the noise generated during construction and the estimated effects of mitigation measures on noise levels. Table 4.17-6 provides the estimated construction time.

S008-53
Section 4.14.4 has been revised in response to the comment.

S008-54
Section 4.14 contains additional information on noise levels. Section 4.14.4 contains the anticipated reductions in noise levels due to mitigation.

- We recommend that the EIS/EIR address hearing protection for construction workers and for facility operators. Note that both federal (OSHA) and state (Cal-OSHA) regulations apply. S008-55

Water Quality and Sediments

- Page 4.18-20, lines 18-23. The project proposes to use approximately 2.5 million gallons of fresh potable water obtained from the City of Oxnard for hydrostatic testing purposes. We recommend that reclaimed water, if it is available, should be used instead for this purpose. The unnecessary use of fresh potable water when reclaimed water is available would be considered a waste or unreasonable use of water and inconsistent with the reclaimed water use regulations of the State. S008-56

- Page 4.18-22, lines 29-32. The DEIS/DEIR states that "Some sediments may be contaminated with pollutants such as heavy metals. However, there are no known locations of contaminated sediments at the mooring turret or along the subsea pipeline route and therefore there is no anticipated release of pollutants." Contaminates may also include environmentally persistent organics, such as PCBs, TCDDs, TCDFs, and DDT among others. Disturbing contaminated sediments, particularly those that may be capped by uncontaminated sediments, may lead to their dispersion in the water column and dissemination over a wider area, and would likely be considered a significant adverse impact requiring mitigation to less than significant. These soft substrate sea floor construction areas should be sampled, analyzed, and any contamination present adequately characterized. We recommend that mitigation be required during construction, e.g., sediment curtains or other containment BMPs, and contaminated sediments that are exposed should be properly disposed of or capped in accordance with applicable laws, ordinances, regulations, and standards. S008-57

The Energy Commission staff is available to discuss any of these comments, questions, or issues. We are happy to provide information regarding energy system impacts and other energy-related information we may have that would assist you in your analysis of the project.

We wish to thank you for this opportunity to comment on this project. Should you have any questions regarding the comments presented above, please call Mr. Terrence O'Brien, Deputy Director of the Systems Assessment & Facilities Siting Division, at (916) 654-3924, or Mr. Eric Knight, Energy Facilities Siting Project Manager, at (916) 653-1850.

Sincerely,

ROBERT L. THERKELSEN
Executive Director

S008-55
The protection of construction workers is regulated under OSHA and Cal-OSHA whose regulations will be applied to the proposed Project.

S008-56
"Public Services" in Section 4.16.1.2 addresses this topic.

S008-57
As discussed in WAT-2 in Section 4.18.4, there are no known locations of contaminated sediments at the mooring turret, along the subsea pipeline route, or near Ormond Beach; therefore, the release of pollutants offshore is not anticipated. In addition, disturbance of offshore waters would be of short duration.

308513

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MEMORANDUM

TO: Cy Oggins
California State Lands Commission
100 Howe Avenue
Sacramento, California 95825

FROM: Dean C. Simeroth, Chief
Criteria Pollutants Branch

LLSG 2004-16877-644

DATE: December 2, 2004

SUBJECT: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)/ ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE CABRILLO PORT LIQUEFIED NATURAL GAS DEEPWATER PORT (STATE CLEARINGHOUSE #2004021107, DOCKET #2004-16877)

Thank you for the opportunity to comment on the Draft EIS/EIR for the Cabrillo Port Liquefied Natural Gas Deepwater Port.

We support the use of natural gas as a clean fuel. Natural gas is among the cleanest of fuels used for electrical generation and industrial, commercial, and residential heating. Natural gas is part of several air quality programs that the Air Resources Board (ARB) has implemented to reduce emissions from stationary and mobile source applications. The continued use of natural gas plays an important role in California's progress towards attaining our national and State ambient air quality standards. The ARB supports any expansion on the availability of natural gas for California.

We reviewed the Draft EIS/EIR and believe that the document adequately addresses the potential air quality impacts associated with the proposed project. As indicated in the document, conformity with applicable air quality regulations of the Ventura County Air Pollution Control District and the South Coast Air Quality Management District will be made. Also, the document implies that the project proponent will import liquefied natural gas that will meet the California ARB's motor vehicle specifications for compressed natural gas. Deviation from this presumption would alter downstream emissions impacts from natural gas combustion sources due to changes in pipeline natural gas quality.

S009-1

S009-1
Neither the purpose nor the objective of this Project is to supply natural gas for CNG vehicles; therefore, the impacts with respect to CNG vehicle fuel requirements have not been analyzed.

Section 2.2.1 contains information on the properties of natural gas to be imported by the proposed Project, which would meet California's requirements for pipeline-quality gas throughout Project operations and confirmed through testing of every shipment.

As indicated in Section 4.6.2, the natural gas imported by the proposed Project would need to meet the requirements of Rule 30 and General Order 58-A of the California Public Utilities Commission (CPUC) or it could not be accepted for distribution by SoCalGas. Rule 30, as described, has specific requirements, including a heating value range.

Section 4.6.2 contains additional information on the regulatory setting affecting air quality and a revised discussion of the heating value of imported natural gas that incorporates the recent rulemaking by the CPUC. An analysis of the impacts of the CPUC rulemaking is beyond the scope of this document as required by NEPA and the CEQA.

Again, thank you for the opportunity to comment. If you have any questions regarding these comments, please call me at (916) 322-6020 or Mr. Gary M. Yee, Manager, Industrial Section at (916) 327-5986.

cc: Mr. Gary M. Yee, Manager
Industrial Section